FORM MR-REV (Revised January 2003) FOR DOGM USE ONLY:

File #:(M/S) 0351011 - ( )
Approved: (mm/dd/yy) Oct 12612005

Bond Adjustment: (\$) 10, 294, 700

Copperton Contentrator

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple Suite 1210
Box 145801

Salt Lake City, Utah 84114-5801 Telephone: (801) 538-5291 Fax: (801) 359-3940 RECEIVE

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DIV OF OIL GAS & MINING

#### NOTICE OF INTENTION TO REVISE MINING OPERATIONS

When an operator intends to revise a mining operation, a **Notice of Intention to Revise Mining Operations** shall be filed with the Division. The notice must include all information, concerning the revision, that would have been required if it had been included in the original Notice of Intention (NOI). Ideally, the revision application should be a "stand-alone" document and include all information necessary to conduct a complete review.

"REVISION" means a significant change to the approved Notice of Intention to Conduct Mining Operations, which will increase the amount of land affected or alter the location and type of onsite surface facilities such that the nature of the reclamation plan will differ substantially from the approved Notice of Intention. Revisions require a formal public notice of tentative approval and may require a change in the amount of reclamation surety.

"AMENDMENT" is an insignificant change to the approved Notice of Intention. An amendment requires Division approval, but does not require public notice.

The Division will determine whether a request for change is significant or insignificant on an individual case-by-case basis.

#### PLEASE NOTE:

When applicable, reference to previously approved information contained in the original NOI can be used (identify volume #'s, section, page #, plate/map #'s, & date of submittal). If possible, please attach appropriate copies of the referenced material as part of the application for revision.

Where possible, please format the application to revise mining operations (e.g., text, maps, tables, figures, etc.) to allow direct insertion into the original NOI as replacement pages, or as a separate addendum to the approved NOI.

The operator is encouraged to use this form as a guide only. Please use extra sheets as necessary to complete each section that follows.

The following information must be included as part of the application to revise mining operations:

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I. GENERAL INFORMATION (Rule R647-4-104)
1. Name of Operator/Applicant: Kennecott Utah Copper Corporation
2. Name of Company/Corporation: Kennecott Utah Copper Corporation
3. Address: PO Box 6001, Magna, Utah 84044-6001
4. Phone: ( 801) 569-6000 Fax:( 801 ) 569-7192
5. Name of Mine/Project: Copperton Concentrator / Pebble Crusher
6. Previously Assigned File Number: (M / S) /035 / 011 *from original Notice of Intention (NOI)
7. Location of Proposed Activities:
COUNTY Salt Lake
TOWNSHIP, RANGE, SEE ATTACHMENT
SECTION(S) (Identify to 1/4, 1/4 section) SEE ATTACHMENT
8. Ownership of Land Surface:
Private (Fee) Owners Name(s): Kennecott Utah Copper Corporation
State of Utah Public Domain (BLM) National Forest (USFS)
9. Ownership of Minerals:
Private (Fee) Owners Names(s):Kennecott Utah Copper Corporation
State of Utah Public Domain (BLM) National Forest (USFS)
10. BLM Lease or Project File Number(s) and/or USFS assigned Project Number(s):_ DOGM_File_NumberM/035/011
11. Utah State Lease Numbers(s): NA

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## II. MAPS, DRAWINGS & PHOTOGRAPHS (Rule R647-4-105)

Appropriate maps, drawings, plates, etc. should be provided that are pertinent to the revision, or amendment of mining operations. Please provide a revised map outlining the previously approved and the new proposed disturbed area boundaries. These materials should be prepared according to the requirements of Rule R647-4-105.

List map numbers or appendices used for this section: Three (3) maps ae attached

#### III. OPERATION PLAN (Rule R647-4-106)

Provide a narrative description, referencing any appropriate attached maps or drawings, of the pertinent details of the proposed change(s) in the operating plan. Specific details which are different from those described in the original approved NOI should be included. Identify additional proposed surface disturbance. Include the total number of acres to be affected by the revision or amendment. All appropriate information requirements as outlined under Rule R647-4-106 must be addressed in the application.

SEE ATTACHMENT	
IV.IMPACT ASSESSMENT (Rule R647-4	-109)
Please provide information as required surface and/or subsurface impacts which mining operations.  SEE ATTACHMENT	under Rule R647-4-109 regarding projected potential ch may be associated with the proposed change(s) in

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Page 4 Form MR-REV		
V.	RECLAMATION PLAN (Rule R647-4-110)	
	Describe how you intend to stabilize the disturbed areas upon cessation of operations. This includes backfilling excavations, grading, sloping or contouring, permanent stabilization of slopes or roads, permanent closure of roads, removal of structures and improvements, etc. Provide cross section of the proposed final contour of the land after reclamation.	
	Please outline any proposed changes to the originally approved reclamation plan. Appropriate sections of Rule R647-4-110 must be addressed as they may apply to the proposed change(s) in mining operations.	
	NA - No additional disturbed areas	
	SEE ATTACHMENT	
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/1	VADIANCE (Dulo DC47 4 442)	
V I.	VARIANCE (Rule R647-4-112)	
	Please identify any requests for variance from the requirements of rules R647-4-107, -108, or -111. A narrative justification must also be included for each variance request. A discussion of any alternate methods or other mitigating measures should be included, if applicable.	
	There are no new variance requests as part of the	
	Pebble Crusher NO1.	
_		
-		
VII	. SURETY (Rule 647-4-113)	
	Reclamation Surety:	

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Indicate whether the proposed activities will change the amount of work required to reclaim the minesite. If significant changes will result, then an itemized reclamation cost estimate should be provided (and attached) with direct reference to the specifics of the proposed change(s). This information will be used to assist the Division in determining any reclamation surety adjustments required for the operation.

	e structure, however, this will not increase
the disturbed acre	age.
SEE ATTACHMENT	
III. SIGNATURE REQUIREM	IENT
he application for permit char	nge must include a section similar to the following example:
I hereby certify that the fourthorized to bind the comp	regoing is true and correct. I also certify that I am duly any/corporation to this notice.
10	이 하다면서 하는 것이 되는 것이 없는 것이 없는 것이 없는 것이 없다.
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lame (Typed or Print):	ENTAL AFFAIRS

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DIV OF OIL GAS & MINING

# **ATTACHMENT FOR**

# NOTICE OF INTENTION TO AMEND MINING OPERATIONS

PERMIT M/035/011

KENNECOTT UTAH COPPER CORPORATION COPPERTON CONCENTRATOR PEBBLE CRUSHER

SUBMITTED TO
THE UTAH DIVISION OF OIL, GAS AND MINING
MARCH 2005

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# I. GENERAL INFORMATION (Rule R647-1-104)

## **Location of Facility**

The Copperton Concentrator facility and DOGM Permit boundary covers the following tracts of land:

Section 31 T1S, R2W Sections 6, 7, 8, 16, 17, 21, 28, 29 & 32 T2S, R2W Sections 5, 6, 7 & 18 T3S, R2W

# II. MAPS, DRAWINGS & PHOTOGRAPHS (Rule R647-4-105)

Drawing No. 454-T-0062 shows the current approved facilities, with section, township and range.

Drawing No. 454-T-0152 shows the general location of the new Pebble Crushing and Conveying facility outlined in red. This is not to scale and only shows the general location.

Drawing No. SK-3320-M-201XY is the general plot plan showing specific locations of planned facilities. Conveyors are shown in red, the electrical/utilities room is outlined in pink, and the magnet screen tower, pebble crushing building and sag mill crushed pebble feed and distribution are highlighted in green.

## III. OPERATION PLAN (Rule R647-4-106)

### **Current Operation**

Currently, coarse ore is delivered from the mine by a 5-mile-long conveyor system from the in-pit crusher to the covered ore stockpile located immediately west of the Copperton Concentrator. From the stockpile, ore is transported onto four parallel conveyors feeding into one of four SAG mills. The SAG mill grinds the ore prior to sending it to one of two ball mills for further grinding before being sent to flotation for processing. Each SAG mill has a trommel screen attached to the discharge end of the mill. Trommel oversize is water jetted back into the SAG mill for further grinding while undersize material flows by gravity to the ball mill circuit, where it is split between two ball mills. Ground ore material is then sent to flotation to separate the ore material into metal bearing concentrate for further processing and tailings for disposal.

# Planned Changes

In an effort to increase throughput of copper ore in the Copperton Concentrator and improve process efficiency, KUCC intends to add two pebble crushing units and related material handling equipment (e.g., conveyors). The addition of this equipment will result in an overall reduction in air emissions, and energy and process water requirements.

Oversized SAG mill pebbles will be removed from the SAG mill trommels and conveyed to a pebble surge bin upstream of the pebble crushers located south of the existing APPROVED

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grinding plant building. Pebbles will then be fed to two Metso pebble crushers from the surge bin using variable speed belt feeders. A variable speed belt feeder will relay the

crushed pebbles to a SAG Mill feed and distribution point. Four belt feeders will meter material to four new conveyors that will feed the existing SAG mill feed chutes. Preliminary data indicates an average potential throughput increase of 18 percent, from a nominal 138,000 stpd to 163,000 stpd.

## IV. IMPACT ASSESSMENT (Rule R647-4-109)

The planned pebble crushing facility will result in no additional surface land impacts. The new pebble crushing and conveying facility will be located on already disturbed ground entirely within the boundaries of permit number M/035/011. The facility will be constructed adjacent to and south of the existing grinding and flotation building, located within the south west corner of section 6 and the south east corner of section 5, Township 3 south and Range 2 west (Drawing 454-T-0062). Attached map 454-T-0152 shows the general location of the planned facilities, while drawing SK-3320-M-201XY shows the proposed facilities to scale and in plan view.

The planned crushing facility will be located on land that has already been disturbed by ore processing activities. The addition of this equipment is a continuation of activities already occurring at the Copperton Concentrator, which are largely defined by crushing, conveying and flotation.

The planned process capacity upgrades are insignificant changes since they will not increase the disturbed area or amount of work required to vegetate the site. In addition, costs associated with mobilization/demobilization of demolition equipment, utility isolation, engineering and revegetation are already included in the existing reclamation surety bond. The new facilities will only result in an increase in structures requiring removal once ore processing activities have ceased.

The estimated total cost for demolition of the pebble crushing facility is \$87,520, which includes removal of steel structures and concrete (Table 1). The total for demolition of steel structures is \$64,870. This is based on a cost of \$0.75 per square foot per 15 feet in height for demolition. The facility will cover 49,425 square feet, multiplied by a height factor of 1.75. Removal of the concrete based from the pebble crushing building will cost \$22,650. The concrete based under the pebble crushing building will comprise 302 cubic yards of concrete at a removal rate of \$75/cubic yard. This estimate does not include credits for recyclable scrap materials such as steel. Using the GDP Deflator inflation calculation, this is escalated to \$92,045 to cover reclamation costs at the end of the next escalation period (2008) that applies to the existing contract and surety for the Copperton Concentrator.

#### ENGINEERING COST ESTIMATE FOR DEMOLITION OF PEBBLE CRUSHER

**Steel Structure Demolition** 

Area

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Pebble Crushing Building + Magnet Screen Tower + SAG Mill crushed Pebble Feed & Distribution and Conveyors = 49,425 square feet.

Demolition

\$0.75/square foot/15 feet in height x 1.75 (height factor)

Cost Estimate

 $0.75 \times 49,425$  square feet x 1.75 = 64,870

### **Concrete Demolition**

Volume

Concrete Pad for Pebble Crushing Building = 302 cubic yards

Demolition

Demolition = \$75/cubic yard

Cost Estimate

 $75 \times 302$  cubic yards = 22,650

**Reclamation Supervision** 

10% of reclamation estimate (\$87,520) = \$8752

Contingency

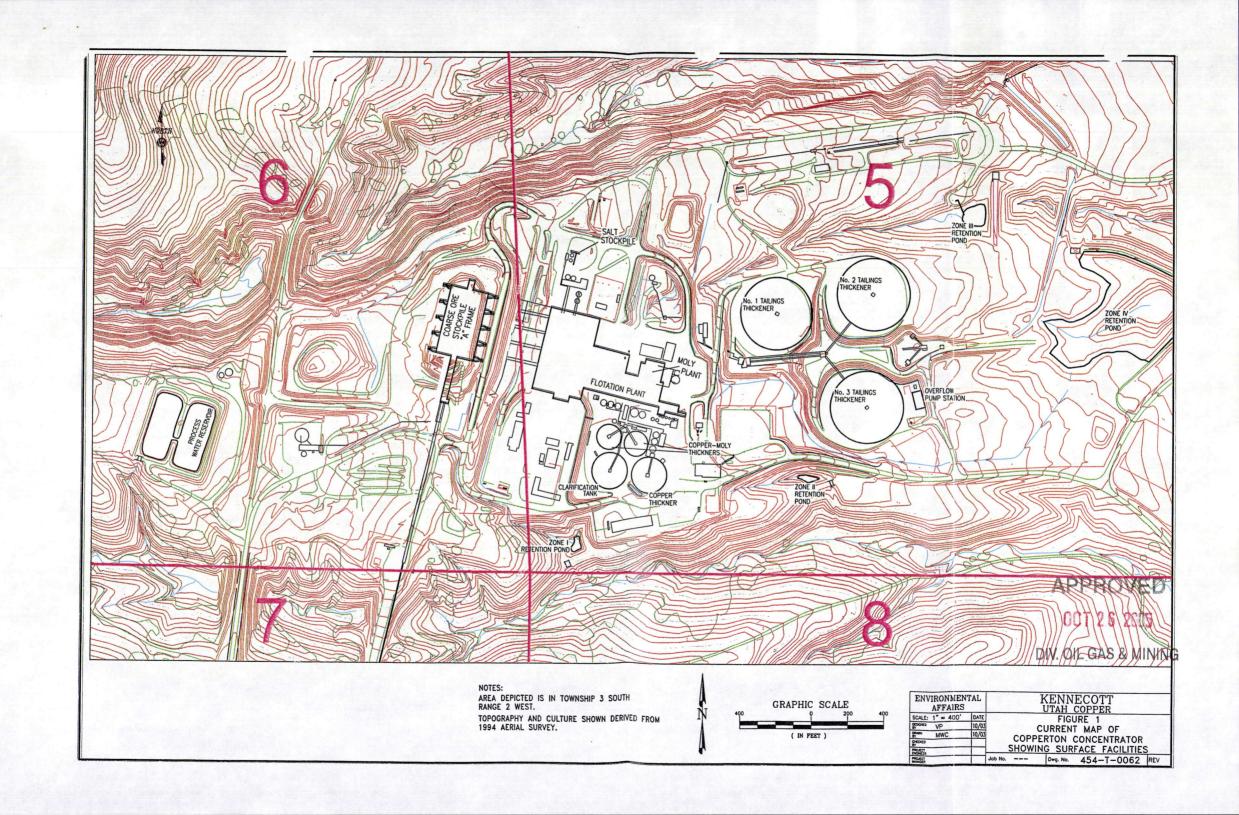
10% (\$96,272) = **\$9627** 

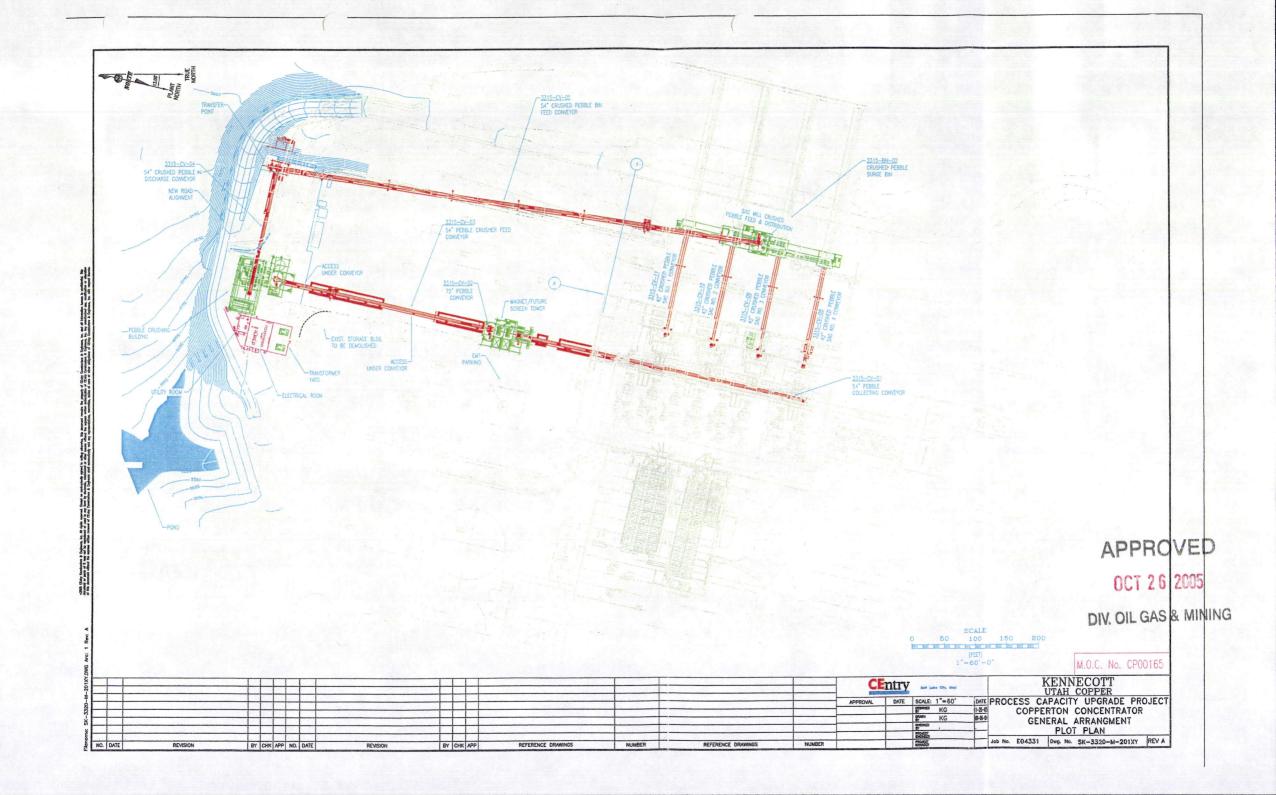
Total Demolition Cost (2005 Dollars) = \$ 105,900

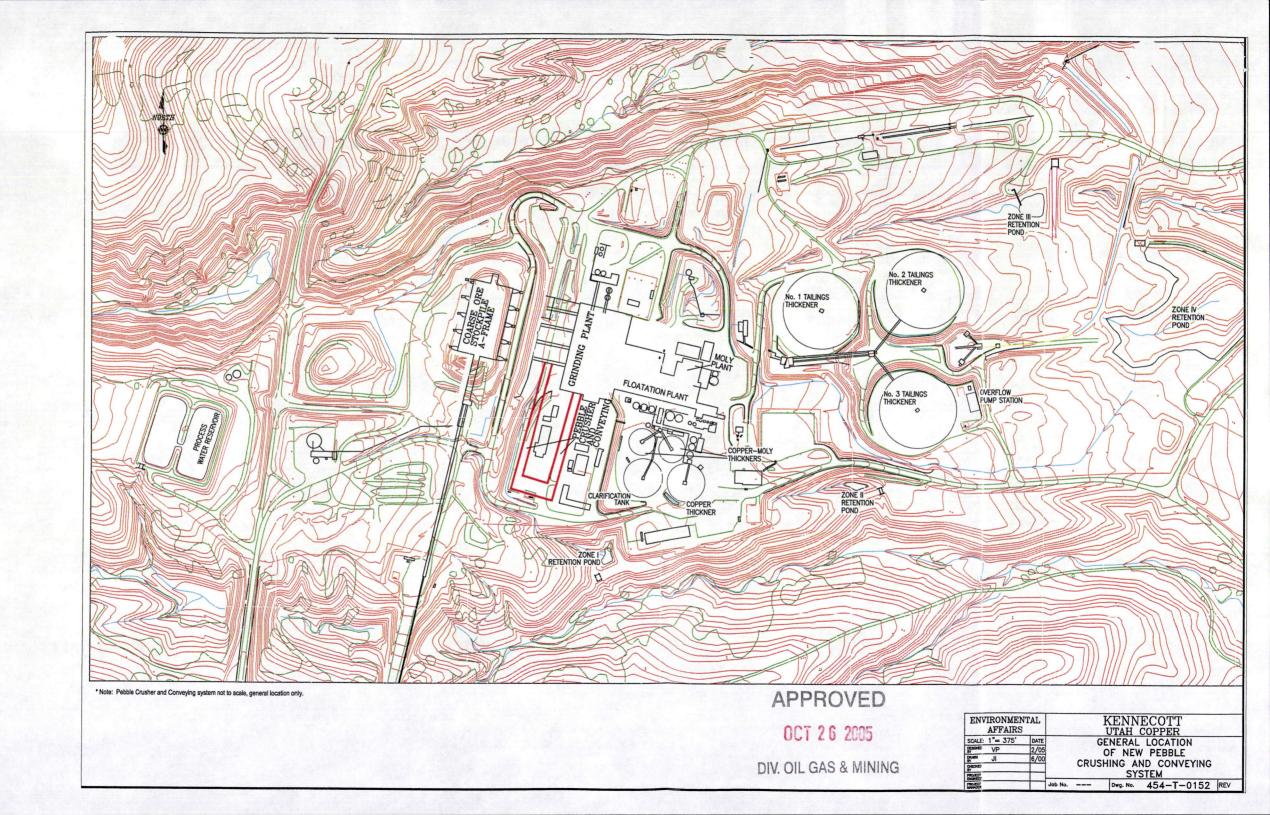
Total Rounded Surety Amount (Escalated to 2008 Dollars at 4.44%/year) = \$120,600

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Kennecott Utah Copper Corporation P.O. Box 6001 Magna, Utah 84044-6001 (801) 569-6000

(801) 569-7120 (Phone) (801) 569-7192 (Fax)

Paula H. Doughty
Director, Environmental Affairs



June 27, 2005

### **CERTIFIED MAIL**

Ms. Susan White Minerals Reclamation Program Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, Utah APPROVED

DIV. OIL GAS & MINING

Subject:

Notice of Intention to Amend Mining Operations: Copperton Concentrator:

DOGM Permit M/035/011

Dear Ms. White:

As per Utah Administrative Code R647-4-118, attached is a notice of intention to amend Mining Operations for permit number M/035/011 for the addition of a pebble crushing and conveying facility at the Copperton Concentrator.

As requested in a letter received from the Division on May 22<sup>nd</sup>, 2005, attached are two clean copies of the amendment to our approved plan and the \$120,600 reclamation surety for this project. The estimate comprises \$87,520 for demolition in addition to supervision costs, contingency and escalation to 2008 dollars. A description of the planned changes and engineering drawings are included with this notice.

Please contact me at 569-7120 or Vicky Peacey (569-7118) if you have any questions or comments.

Sincerely.

Paula H. Doughty

Director, Environmental Affairs

Attachments

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